

# XelPleX

## Hardware configuration

The following technical specification sheet provides a summary of the XelPleX instrument configuration, options and specifications.

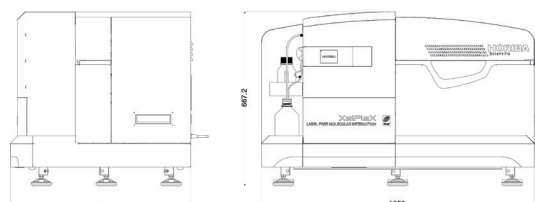
XelPleX is a fully automated system providing the ideal solution for the development of label-free, multiplexed bioassay and biomolecule detection. It is designed for easy determination of real time interaction and kinetic studies. The optimized fluidic system allows to give full kinetic profiles within minutes and helps to make the right decisions quickly and confidently.

### XelPleX - Fully Automated Platform for Surface Plasmon Resonance imaging

Sample type	Proteins, peptides, DNA, serum (raw), cells, nanoparticles
Sample volume	100-800 $\mu$ L (typically 200 $\mu$ L)
Sample concentration	from ng/mL to several $\mu$ g/mL
Sample molecular weight	$\geq$ 150 Da
Detection limit	3 pg/mm <sup>2</sup> in monoangle, 5 pg/mm <sup>2</sup> in scanning angle
Liquid refractive index range	1.30-1.37
Light source	High stability LED (810 nm)
Detector	CCD camera, IEEE 1394 Firewire, 16 bit, 752 x 582 pixels
Optical lateral resolution	40 $\mu$ m
Degassing system	In line degasser
Autosampler	Integrated autosampler with 2 microplates (12, 48, 96 or 384 wells microplate)
Autosampler temperature	7° C to 25° C $\pm$ 2° C
Flow cell analysis zone	8.8 x 8.8 mm
Flow cell volume	7.5 $\mu$ L
Flow cell height	50 $\mu$ m
Flow cell temperature range	10-50° C

Automatic cleaning procedure - 2 buffers (manual choice at the experiment start)

### Environment



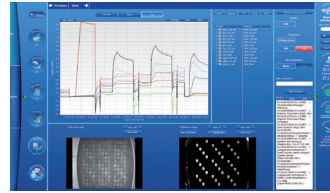
Weight	130 kg (286.60 lbs)
Operating temperature	15-28° C
Voltage	110/220 V 50-60 Hz



## SPRi EzSuite

The XelPlex is delivered with an

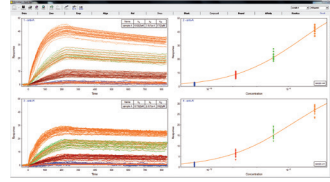
- EzView software retrieves real time information through flow cell and SPRi difference images, and kinetics status.
- Injection sequences can be programmed in the EzView software to automatically control the integrated autosampler.
- EzAnalysis retrieves quantitative information and performs data quality control automatically.
- EzFit (based on Scrubber) cleans and fits kinetics data to a 1:1 interaction model to calculate affinity and kinetic rates.



Snapshot of the EzView control software



Snapshot of the autosampler settings in EzView



Data fitting in EzFit to extract kinetic rates and affinity



Data clouding of a 300 peptides array for epitope mapping

## Consumables and Reagents

### SPRi-Biochips™ and SPRi-XelSlide™



Sensor chips available in bare gold or functionalized and ready-to-use

The sensor chips are available in bare gold or functionalised and ready-to-use with SAM or Dextran-based surface chemistries.

### SPRi Reagents™



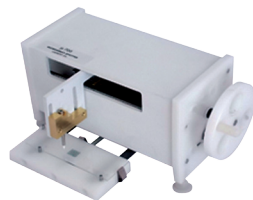
The reagents are ready-to-use and include running buffers, blocking solutions, regeneration solutions, etc.

## Additional Equipment for Sample Preparation

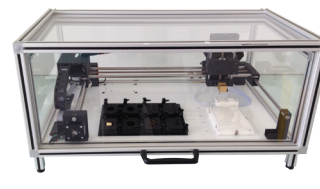
As part of the HORIBA Scientific SPRi platform, the spotting devices allow you to immobilize your molecules onto the sensor chips in a micro-array format.



Micropipette SPRi Spotter



Manual SPRi-Arrayer



Automatic SPRi-Arrayer



SPRi-CFM

\*Specifications are subject to change and HORIBA Jobin Yvon SAS reserves the right to alter specifications without notice. It is forbidden to copy from the contents of this leaflet in part or in full without the written permission of HORIBA Jobin Yvon SAS.

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